SEQUENCE LISTING

<110> SKIADOPOULOS, MARIO H.
      MURPHY, BRIAN R.
      COLLINS, PETER L.

<120> RECOVERY OF RECOMBINANT HUMAN PARAINFLUENZA VIRUS TYPE
      2 (HPIV2) FROM cDNA AND USE OF RECOMBINANT HPIV2 IN
      IMMUNOGENIC COMPOSITIONS AND AS VECTORS TO ELICIT
      IMMUNE RESPONSES AGAINST PIV AND OTHER HUMAN PATHOGENS

<130> 2303-44-3

<140> 10/667,141
<141> 2003-09-18

<150> 60/412,053
<151> 2002-09-18

<160> 70

<170> PatentIn Ver. 3.2

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Ser Ile Phe Met Lys Asp Lys Ala
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Cys Phe Val Arg Asn
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<213> Human parainfluenza virus 1

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Cys Phe Val Arg Asn
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<213> Human parainfluenza virus 3

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<210> 9
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<212> PRT
<213> Human parainfluenza virus 1

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<212> PRT
<213> Human parainfluenza virus 2

<400> 10
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<213> Human parainfluenza virus 1

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<210> 13
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<210> 15
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<210> 19
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<210> 24
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<210> 26
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<400> 26
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<210> 27
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<400> 29
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<210> 30
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<210> 31
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<210> 32
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<213> Human parainfluenza virus 2

<400> 32
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<210> 33
<211> 47
<212> DNA
<213> Human parainfluenza virus 2

<400> 33
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<210> 34
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<212> DNA
<213> Human parainfluenza virus 2

<400> 34
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<210> 35
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<213> Human parainfluenza virus 2

<400> 35
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<210> 36
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<210> 37
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<400> 38
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<210> 39
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<400> 39
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<210> 40
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<400> 40
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<212> DNA
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<400> 42
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<210> 44
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<400> 46
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<210> 48
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aaaatctgat acagcttaat ccactcaac   89

<210> 49
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<210> 50
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<210> 51
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<210> 52
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<220>
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<222> (9)
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<210> 54
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<213> Artificial Sequence
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<210> 56
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aac agt gat tat aag aac tca tga   75
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Asp Tyr Lys Asn Ser
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<210> 58
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<400> 58
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